

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
NEWNAN DIVISION

SIERRA CLUB, PHYSICIANS FOR
SOCIAL RESPONSIBILITY,
GEORGIA FORESTWATCH, and
EILEEN LANGE,

Plaintiffs

v.

GEORGIA POWER COMPANY,

Defendant.

CIVIL ACTION
NO. 3:02-CV-151-JTC

ORDER

Pending before the Court are Plaintiffs' Motion for Summary Judgment on Counts I and III of their Complaint [#46], Defendant's Motion for Summary Judgment on Counts I, II, and III [#45], and Plaintiffs' Motion in Limine to Exclude Richard McRanie's Expert Testimony [#69]. The Court heard oral argument on these motions on August 12, 2004 and has reviewed the extensive record in the case.

The significant issues in this case involve the legal effect of Defendant's reports of excess emissions of air pollution and whether the emissions' occurrence during startup, shutdown, and malfunction results in a defense to them as violations. The reports filed by Defendant Georgia Power pursuant

to the Clean Air Act are reliable evidence and constitute prima facie evidence of a violation. That the emissions occurred during startup, shutdown, or malfunction gives Georgia's Environmental Protection Division enforcement discretion, but does not provide Georgia Power an affirmative defense to this citizen-suit.

I. The Clean Air Act

The Clean Air Act (the "Act"), 42 U.S.C. §§ 7401-7671q, is a federal law aimed at protecting the public health and welfare from the effects of air pollution. To achieve this goal, the Act provides, among other things, for National Ambient Air Quality Standards ("NAAQS"). 42 U.S.C. § 7410. NAAQS are based on maximum allowable levels of certain air pollutants, including ground-level ozone and particulate matter. The Act requires all states to adopt "State Implementation Plans" ("SIPs") for meeting the air pollution level required by the NAAQS. Each state's SIP must be approved by the U.S. Environmental Protection Agency (the "EPA") and, once approved, is enforceable in the courts by an action filed by either the State, the EPA, or by citizens.

In 1990, Congress amended the Act to include Title V. The amendment had a dual purpose: to apply the Act to stationary sources of air pollution emissions by requiring operating permits; and to provide operational

flexibility to accommodate the power industry's need to respond to changing market conditions. See The Federal Title V Air Quality Permit Program for Operating a Major Source of Air Pollution, 33 *Envtl. L. Rep.* (Envtl. L. Inst.) at 10815 (Oct. 2003). Title V requires operating permits for stationary sources of air pollution such as Defendant's Wansley Plant located in Heard County, Georgia. Under this comprehensive permitting scheme, all the clean air requirements for a covered source are contained in one document - the operating permit. This Order deals with Plant Wansley's operating permits.

Congress also sought to impose strict emission requirements on stationary sources in areas, such as the Atlanta metropolitan area, where emissions exceed applicable air quality standards.¹ Operating permits issued by Georgia's Environmental Protection Division ("EPD") under Title V must consolidate all regulations applicable to stationary sources of air pollution.

See 42 U.S.C. §§ 7661-7661f.

As one of the requirements of the Act, Title V operating permits contain emission limitations for particulate matter pollution. The amount of particulate matter pollution is determined by "Opacity" measurements. As

¹ Atlanta has been a "non-attainment" area for a number of years, which means that it does not meet the primary or secondary NAAQS for certain pollutants. See 42 U.S.C. § 7407(d)(1)(A); Sierra Club v. Atlanta Reg'l Comm'n, 255 F. Supp. 2d 1319, 1327 (N.D. Ga. 2002) (Martin, J.). Atlanta is a non-attainment area for ozone.

the name implies, “Opacity” refers to the reduction in the transmission of light caused by particulate matter emissions. If opacity were 100%, for example, no light would penetrate the emissions and visibility would be completely obscured. Zero percent opacity would indicate the presence of no particulate matter.

Another requirement of the Act limits emission of hazardous air pollutants, volatile organic compounds, and carbon monoxide. During the 1990's, new power plants were changing from coal to natural gas, a cleaner fuel. The newer natural gas fired combustion turbines, however, emit more hazardous air pollutants, volatile organic compounds, and carbon monoxide when they are operated at lower power levels. Thus, operating permits require that these turbines be operated at or above certain minimum levels of power.

To monitor compliance with both requirements, the Title V permits require regular compliance reports from stationary sources like Plant Wansley. The reports become public record and are used in governmental monitoring and enforcement. Georgia Power submits Quarterly Excess Emissions Reports (“Quarterly Reports”) and Annual Compliance Certifications to EPD and EPA.

II. Procedural Background

Plaintiffs' Complaint contained five counts, each asserting a different claim. On June 19, 2003, the Court entered an Order dismissing Count V of Plaintiffs' Complaint, which asserted that Georgia Power constructed Wansley's combustion turbines without satisfying the maximum achievable control technology to limit emissions. (Dckt. #23.) On June 10, 2004, the Court granted summary judgment dismissing Count IV of Plaintiffs' Complaint, which challenged the emission reductions by other power plants required to issue Wansley's Permit. (Dckt. #76.) Thus, only Counts I through III remain.

Plaintiffs now move for summary judgment in their favor on Count I and part of Count III. Defendant moves for summary judgment in its favor on all three Counts.

III. Factual Background

Plaintiffs bring this suit under the Act's citizen-suit provision, which allows private entities to enforce the Clean Air Act in Court. 42 U. S. C. §7604(a)(1). Plaintiffs allege that Georgia Power's Wansley Steam-Electric Generating Plant in Heard County, Georgia has violated its Title V Operating Permit by emitting large quantities of nitrogen oxides ("NOx"), particulate matter, and toxic air pollutants into the air. Plaintiffs seek penalties for past

violations and an order from this Court enjoining the emission of large quantities of these pollutants in the future.

Three of the plaintiffs, the Sierra Club, Physicians for Social Responsibility, and Georgia Forestwatch, are non-profit corporations with substantial membership in Georgia. All three organizations are committed to obtaining a clean and sustainable environment. The fourth plaintiff, Eileen Lange, is a Georgia resident who suffers from a respiratory ailment that she alleges is adversely affected by pollution from Plant Wansley.

Defendant Georgia Power Company is a for-profit corporation that operates Plant Wansley. Plant Wansley is one of the nation's larger power plants in terms of electrical output. It is located a few miles from the 13-county Atlanta metropolitan area, which the EPA has designated as a non-attainment area for ozone. Metro Atlanta remained in non-attainment status for ozone for 20 years.

Plant Wansley burns fossil fuels in seven principle emission units to generate electricity. Two are older units that use a pulverized coal combustion process and emit exhaust through a vertical stack approximately 1000-feet tall. The plant also operates four combined cycle combustion turbine units, which burn natural gas.

Plant Wansley's Title V Permit limits emissions from the coal fired units to 40% opacity.² Permit Cond. 3.4.2. According to reports filed by Georgia Power and based upon its own opacity monitors, Wansley's emissions have exceeded the limitations for particulates on thousands of occasions. The issue in Counts I and II is whether these excess emissions are violations of the Act.

Wansley's Title V Permit also requires as a condition to operation that the combustion turbines not be operated below 85 megawatts of power, except during periods of start up and shutdown. Operating the combustion turbines below 85 megawatts increases the risk of emitting harmful pollutants. Georgia Power's reports indicate the combustion turbines were operated below 85 megawatts on twelve occasions, two of which were reported as occurring for reasons other than startup and shutdown. Count III involves the operation of the combustion turbines.

Counts I and II of Plaintiffs' Complaint involve Wansley's two older coal burning units and their emission of particulates, which pass through a 1000

² Unlike Georgia, many states' SIPs impose a 20% opacity limit. See, e.g., Grand Canyon Trust v. Pub. Serv. Co. of N.M., No. CIV 02-552 BB/ACT, slip op. at 7 (D.N.M. undated); Nat'l Parks Conservation Ass'n, Inc. v. Tenn. Valley Auth., 175 F. Supp. 2d 1071, 1074 (E.D. Tenn. 2001); Anderson v. Farmland Indus., Inc., 70 F. Supp. 2d 1218, 1230 (D. Kan. 1999); Sierra Club v. Pub. Serv. Co. of Colo., 894 F. Supp. 1455, 1457 (D. Colo. 1995).

foot exhaust stack. Georgia Power uses monitoring devices located inside the exhaust stack at an elevation of 430 feet to measure opacity. The opacity measurements are used to determine the amount of particulate matter emissions. The opacity monitoring system collects and compiles data that Georgia Power later includes in its Quarterly Reports. Georgia Power's officials certify that the information contained in its Quarterly Reports "is true, accurate, and complete."

As proof that Georgia Power has violated emission requirements as alleged in Counts I and II, Plaintiffs rely solely on Georgia Power's own reports to EPD: Annual Compliance Certifications and Quarterly Reports. In the Quarterly Reports, Georgia Power is required to report all six-minute periods during which the average opacity from Wansley's coal-fired units exceeds the 40% permit condition (i.e., where emissions obscure or block 40% of the light transmission). Georgia Power does not deny that it reported thousands of periods of excess emissions, but contends that the permit allows an affirmative defense to the violations under certain circumstances. See Permit Cond. 8.13.1.

Georgia Power's argument is that the language in the Permit allows an affirmative defense to violations that occur during, or as a result of, startup, shutdown, or malfunction ("SSM"). Even though the original reports did not

indicate that all violations occurred during startup, shutdown or malfunction, Georgia Power now offers expert testimony that all the violations alleged in Counts I and II did result from startup, shutdown, or malfunction of the coal-fired units. Plaintiffs argue, however, that Permit Condition 8.13.1, which refers to emissions during SSM, affords EPD enforcement discretion but creates no defense to the violations in Counts I and II. Although EPD could decide not to penalize Georgia Power, either the EPA or citizens could seek penalties because the excess emissions remain violations of the Act.

Finally, Georgia Power argues that, even if Permit Condition 8.13.1 is not a defense to the violations, the Continuous Opacity Monitoring System (the “Opacity System”) data, which it relied upon in official reports, are not sufficiently reliable to establish the opacity exceedances. Georgia Power presents expert opinions that the Opacity System is sufficiently unreliable that it cannot establish an opacity violation.

Count III of Plaintiffs’ Complaint alleges violations of Permit Condition 3.3.14, which prohibits Georgia Power from “operat[ing] the combustion turbines below 85 [megawatts], except during periods of startup or shutdown.”

Georgia Power admits that on the twelve occasions alleged in Count III, it operated two of Wansley’s natural gas combustion turbines below 85 megawatts. Indeed, like the opacity exceedances at issue in Counts I and II,

Georgia Power reported these twelve events in its Quarterly Reports.

Georgia Power contends, however, that Wansley's Permit allowed these particular events because two of the events are moot and the other events occurred during startup or shutdown.

The Court finds that Permit Condition 8.13.1 does not provide a blanket defense that would prevent either an EPA action or a citizen-suit.

Furthermore, the Opacity System data used to report opacity exceedances is credible evidence of such exceedances. As a result, Plaintiffs are entitled to summary judgment on all but five of the violations alleged in Counts I and all of the violations in Count II. Georgia Power is entitled to summary judgment on five of the violations alleged in Count I. As for Count III, the Court concludes that Plaintiffs are entitled to summary judgment on two of the events and that Georgia Power is entitled to summary judgment on the remaining ten events.

Because a number of terms in this Order are referred to by an acronym, the following glossary is included:

COM - Continuous Opacity Monitoring

COMS - Continuous Opacity Monitoring System

EPA - The Environmental Protection Agency

EPD - Georgia's Environmental Protection Division

NAAQS - National Ambient Air Quality Standards

SIP - State Implementation Plan

SSM - Startup, Shutdown, or Malfunction

The Act - The Clean Air Act

IV. The Parties' Summary Judgment Motions

A. The Legal Standard for Summary Judgment

Federal Rule of Civil Procedure 56(c) defines the standard for summary judgment: Courts should grant summary judgment when “there is no genuine issue as to any material fact . . . and the moving party is entitled to judgment as a matter of law.” The substantive law applicable to the case determines which facts are material. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248, 106 S. Ct. 2505, 2510 (1986). “The district court should ‘resolve all reasonable doubts about the facts in favor of the non-movant,’ . . . and draw ‘all justifiable inferences . . . in his favor’” United States v. Four Parcels of Real Property, 941 F.2d 1428, 1437 (11th Cir. 1991) (en banc).

As a general rule, “[the] party seeking summary judgment always bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions of ‘the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any,’ which it believes demonstrate the absence of a genuine issue of material fact.”

Celotex Corp. v. Catrett, 477 U.S. 317, 323, 106 S. Ct. 2548, 2553 (1986). For issues upon which the moving party bears the burden of proof at trial, the moving party must affirmatively demonstrate the absence of a genuine issue of material fact as to each element of its claim on that legal issue. If the moving party makes such a showing, it is entitled to summary judgment unless the non-moving party comes forward with significant, probative evidence demonstrating the existence of an issue of fact. Fitzpatrick v. City of Atlanta, 2 F.3d 1112, 1115 (11th Cir. 1993) (quoting Four Parcels, 941 F.2d at 1437-38).

When the non-moving party bears the burden of proof at trial, the moving party is not required to support its motion with affidavits or other similar material negating the opponent's claim. Instead, the moving party may simply point out to the court that there is an absence of evidence to support the non-moving party's case on the issue in question. Id. at 1115-16. In either case, the non-moving party may not rely upon allegations or denials in the pleadings, but instead must respond with sufficient evidence to withstand judgment as a matter of law at trial. Fed. R. Civ. P. 56(e); Hammer v. Slater, 20 F.3d 1137, 1141 (11th Cir. 1994) (citing Fitzpatrick, 2 F.3d at 1116-17).

B. Analysis

In this case, Plaintiffs bear the burden of proving that Georgia Power has violated the Conditions of Wansley's operating permit and, thus, the Act's emission standards. Georgia Power admits that the events at issue in Counts I-III occurred, but argues that the Permit allowed these events as a matter of law. Georgia Power argues that the opacity exceedances in Counts I and II all resulted from SSM and that Condition 8.13.1 defeats Plaintiffs' claims for those exceedances. Thus, the Court must first properly construe the relevant Permit provisions.

Congress established the EPA and charged it with interpreting and enforcing the Act. 42 U.S.C. § 7413. Thus, EPA's interpretation of the Act, when reasonable, carries great weight. See Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 843-44, 104 S. Ct. 2778, 2782 (1984). Furthermore, the Act requires that operating permits be approved by EPA as consistent with the Act. Thus, the Court will assume that EPA's approval of Wansley's permits indicates that the permits comply with the Act's requirements as interpreted by EPA. In order to properly interpret Wansley's Permit, therefore, the Court must first construe the relevant portions of the Act and EPA's regulations and policy issued pursuant to it.

i. EPA Policy on Excess Emissions Occurring During Startups, Shutdowns, and Malfunctions

To preserve the public health, § 110 of the Act provides for the enforcement of NAAQS via SIPs, which contain emission limitations. 42

U.S.C. § 7410. SSM events pose a risk of exceeding the emission limitations contained in SIPs or operating permits. Although the Act

does not explicitly address SSM regulations under section 110 of the Act, [EPA is required to determine whether a SIP submission . . . provides for the attainment and maintenance of the . . . NAAQS. Because SIPs are developed to attain and maintain ambient-based standards, any emissions above the SIP-approved limits may cause or contribute to violations of the NAAQS. [EPA believes that SSM regulations which are too broadly drawn can threaten attainment and maintenance of the NAAQS. Therefore, EPA believes that it is reasonable to interpret section 110 to prohibit generally applicable SSM provisions.

Approval and Promulgation of State Implementation Plans; Michigan, 63 Fed. Reg. 8573, 8574 (Feb. 20, 1998) (final rule). Accordingly, “[s]ince 1977, the EPA has interpreted all excess emissions as ‘violations’ of the applicable standards for which ‘notices of violations’ could, but not necessarily would, issue.” Mich. Dep’t of Env’tl. Quality v. Browner, 230 F.3d 181, 183 (6th Cir. 2000) (citing 42 Fed. Reg. 21,472 (Apr. 27, 1977)). Over the past twenty-five years, EPA has issued memoranda setting out and clarifying its policy regarding excess emissions during SSM. See Memorandum from Eric

Schaeffer, Dir., Office of Regulatory Enforcement, and John S. Seitz, Dir., Office of Air Quality Planning and Standards, to Reg'l Adm'rs, Regions I-X (Dec. 5, 2001); Memorandum from Steven A. Herman, Assistant Adm'r for Enforcement and Compliance Assurance, to Reg'l Adm'rs, Regions I-X (Sept. 20, 1999); Memorandum from Kathleen M. Bennett, Assistant Adm'r for Air, Noise and Radiation, to Reg'l Adm'rs, Regions I-X (Feb. 15, 1983); Memorandum from Kathleen M. Bennett, Assistant Adm'r for Air, Noise and Radiation, to Reg'l Adm'rs, Regions I-X (Sept. 29, 1982).

EPA's policy distinguishes between the effect of permit provisions regarding excess emissions during SSM as follows: (1) automatic exemptions from compliance with emission limitations; (2) provisions reflecting states' inherent enforcement discretion regarding compliance; and (3) appropriate affirmative defenses to actions for penalties for noncompliance. Schaeffer Memo.; Herman Memo & Att; In re Monroe Power Co., Pet. IV-2001-8, at 13 & n.6 (Oct. 9, 2002) (EPA Adm'r's Order Denying Pet. for Obj. to Permit). "[A]ny provision that allows for an automatic exemption for excess emissions is prohibited." Herman Memo. Att., at 1. See also Approval and Promulgation of State Implementation Plans; Michigan, 63 Fed. Reg. at 8575 ("[B]ecause SIPs protect ambient-based standards, any emissions above the allowable may cause or contribute to violations of the NAAQS, and therefore

cannot be excused.”). Thus, only the second and third categories listed above apply to provisions relating to excess emissions during SSM. In other words, states may exercise their inherent enforcement discretion and not penalize a source for excess emissions during SSM or they may incorporate in a permit an affirmative defense, containing very specific requirements, to such excess emissions.

Affirmative defense provisions for excess emissions during malfunctions must require the defendant to satisfy ten criteria, and affirmative defense provisions for excess emissions during startup and shutdown must require the defendant to satisfy nine criteria. Herman Memo. Att., at 3-6. As for malfunctions, “EPA interprets these criteria narrowly.” *Id.* at 4. As for startups and shutdowns, EPA “expect[s] that careful and prudent planning and design will eliminate violations of emission limitations during such periods” because “startup and shutdown . . . are part of the normal operation of a source.” *Id.* Indeed,

[i]f there are circumstances where a source cannot comply with the SIP during start-up, shutdown or maintenance situations despite careful and prudent planning and design, the State should address these particular problems in development of (or revision to) the underlying rules applicable to those sources and not through overarching excess emissions provisions.

Approval and Promulgation of State Implementation Plans; Michigan, 63 Fed. Reg. at 8575.

ii. Permit Condition 8.13.1 is not an Affirmative Defense to the Opacity Violations at Issue in Counts I and II

Permit Condition 8.13.1 is merely an acknowledgment of EPD's enforcement discretion regarding excess emissions during SSM. It is not an affirmative defense available to Georgia Power in this citizen-suit for several reasons.

First, Permit Condition 8.13.1's plain language indicates it is not an affirmative defense. The condition begins "[t]he Division [EPD] may allow excess emissions in certain cases as described below." Significantly, Georgia Comp. R. & Regs. R. 391-3-1-.02(2)(a)7, from which Permit Condition 8.13.1 was derived, does not contain the prefatory language quoted above, but is identical to the Condition in all other respects. Thus, the condition's plain language limits it to what EPD "may allow . . . in certain cases"

Second, Permit Conditions 8.13.2 through 8.13.5, which immediately follow Permit Condition 8.13.1, show that the drafters of the Permit understood the specific requirements for an affirmative defense. Under those Permit Conditions, EPD provided Georgia Power with "an affirmative defense

to an action brought for noncompliance with the technology-based emission limitations if [Georgia Power] demonstrates” numerous criteria regarding emergencies. Permit Cond. 8.13.3. Consistent with EPA policy regarding affirmative defenses, Permit Conditions 8.13.2 through 8.13.5 require Georgia Power to prove the occurrence of an emergency and to satisfy several criteria to successfully invoke the defense. Permit Condition 8.13.1 contains no similar language and, indeed, does not describe the condition as an affirmative defense, as does condition 8.13.3. Permit Conditions 8.13.1 through 8.13.5 comprise the entire “Excess Emissions” section of the Permit, but EPD expressly incorporated an affirmative defense into only the emergency provisions at 8.13.1 through 8.13.5 and not into the SSM provision at 8.13.1. Moreover, unlike 8.13.1, Permit Conditions 8.13.2 through 8.13.5 do not contain any language regarding EPD’s enforcement discretion.

Third, Permit Condition 8.13.1 does not contain the criteria that EPA’s policy requires for affirmative defense provisions. EPA established ten criteria that defendants must demonstrate for affirmative defenses to excess emissions during malfunctions and nine criteria for affirmative defenses to excess emissions during startups and shutdowns. Herman Memo. Att., at 3-6. Permit Condition 8.13.1 contains no more than three or four of these criteria. See Schaeffer Memo. at 2 (“States may provide . . . appropriately tailored

affirmative defenses, consistent with the September 20, 1999, Guidance.")

(emphasis added).

Fourth, Permit Condition 8.13.1 makes no distinction between malfunctions on the one hand and startups and shutdowns on the other. EPA's policy treats excess emissions during malfunctions differently from excess emissions during startups and shutdowns. Herman Memo. Att., at 3-4 (containing sections entitled "II. Affirmative Defenses for Malfunctions" and "III. Excess Emissions During Startup and Shutdown"). EPA's policy is clear that while certain malfunctions are unavoidable, "startup and shutdown of process equipment are part of the normal operation of a source" for which sources may plan and, thus, avoid excess emissions. Id. at 4.

Finally, EPA's policy allows states to provide affirmative defenses to excess emissions during startups and shutdowns only if such periods of excess emissions were "short and infrequent and could not have been prevented through careful planning and design." Id. at 6. In other words, planning and design should prevent excess emissions during "routine startup or shutdown periods." Permit Condition 8.13.1 contains no such limitations regarding startups and shutdowns. In its Quarterly Reports for 1998 through 2002, which encompass the events at issue in Counts I and II, Georgia Power reported well over two thousand periods of excess emissions during startups

or shutdowns. (Compl. Exs. 1-2.) Some lasted four hours or longer. Id.

These excess emissions arguably are not “short and infrequent” and, thus, do not qualify as an affirmative defense under EPA’s policy.

For all of these reasons, Permit Condition 8.13.1 does not provide an affirmative defense to Georgia Power in this citizen-suit. The condition’s plain meaning is an acknowledgment of EPD’s enforcement discretion regarding excess emissions that occur during SSM. This conclusion is in accordance with EPA’s reasonable interpretation, which is particularly persuasive here because Congress has not directly spoken on the issue.³ See United States v. Mead Corp., 533 U.S. 218, 227-28, 121 S. Ct. 2164, 2171 (2001) (“[A]gencies charged with applying a statute necessarily make all sorts of interpretive choices, and while not all of those choices bind judges to follow them, they certainly may influence courts facing questions the agencies have already answered.”); Browner, 230 F.3d at 185 (“[W]e cannot say that EPA’s

³ Although Bennett’s February 15, 1983 memo and Herman’s September 20, 1999 memo state that EPA was merely clarifying its policy regarding excess emissions occurring during SSM periods, Herman’s memo arguably is more than mere clarification. For the first time, EPA included the words “affirmative defense” in its policy issued with Herman’s 1999 memo and arguably broadened the scope of allowable excess emissions. To the extent EPA’s 1999 policy interpretation conflicts with its earlier interpretations, it “is entitled to considerably less deference” than the earlier policy memoranda. Watt v. Alaska, 451 U.S. 259, 273, 101 S. Ct. 1673, 1681 (1981) (citation omitted).

interpretation of section 110 of the CAA through the Bennett Memoranda is unreasonable.”).

iii. Opacity System Data are Credible Evidence of Opacity Exceedances, and Georgia Power has Failed to Present Evidence Creating a Genuine Issue of Fact as to all the Violations at Issue in Counts I and II

Plaintiffs rely solely on Georgia Power’s self-reported opacity-exceedances, reported in its Quarterly Reports and derived from its Opacity System data, as evidence of the opacity exceedances at issue in Counts I and II. Georgia Power argues that Opacity System data are not “credible evidence” of opacity exceedances and, thus, do not support Plaintiffs’ claims. Instead, according to Georgia Power, Plaintiffs must present data from the reference test method - “Method 9” in this case - to prove opacity exceedances.

Under the Method 9 test method, a trained and certified person visually observes the smoke plume as it exits the top of the 1,000-foot emissions stack and records data at periodic time intervals. An Opacity System, in contrast, uses a transceiver, a reflector, and an opacity sensor, all located inside the stack at an elevation of 430 feet, to measure opacity. In

this case, Method 9 is the reference, or benchmark, test, while Georgia Power's Opacity System data, which it compiles into its Quarterly Reports, is non-reference test data. Permit Condition 4.1.3(h) and § 1.3(g) of EPD's Procedures for Testing and Monitoring Sources of Air Pollutants provide that Method 9 or other credible evidence may be used to establish a violation of any emissions limitation or standard.

EPA promulgated the so-called "credible evidence rule" in 1997. Credible Evidence Revisions, 62 Fed. Reg. 8314 (Feb. 24, 1997) (the "Rule"). The Rule "merely addresses an evidentiary issue" in that it "removes what some have construed to be a regulatory bar to the admission of non-reference test data to prove a violation of an emission standard, no matter how credible and probative those data are that a violation has occurred." *Id.* at 8314-15. Georgia Power relies on the following language in the Rule as support for its contention that Opacity System data are not credible evidence of opacity exceedances:

[40 C.F.R. Part 51,] Section 51.212(c) is revised to clarify that the inclusion in a state implementation plan (SIP) of enforceable test methods for SIP emissions limits does not preclude enforcement based on other credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed.

Id. at 8316 (emphasis added).⁴ Georgia Power’s argument is unpersuasive.

Read in its entirety, the Rule itself suggests that Opacity System data are equivalent to Method 9 test results. The Rule provides that a non-reference test method, like an Opacity System, must retain the two key elements of a reference test method: quantification (of particular physical attributes) and measurement over a specified time period. Id. at 8319.

However, “[t]here is no need to establish that every test condition specified in a reference test method has been matched by a surrogate condition in the method used to generate the comparable information.” Id. Indeed, “non-reference data that is already quantified in the same units as the underlying standard, e.g., emissions data generated by properly operating and calibrated non-reference CEMs,⁵ should generally be comparable to reference test data.”

Id. (emphasis added). See also id. at 8317 (noting that the equivalency requirement “does not mean that, to prove a violation occurred, ideal testing conditions . . . must exist if other credible evidence, such as continuous

⁴ Although the quoted language does not use the word “equivalent” regarding the relationship between reference and non-reference test methods, one statement in the Rule suggests that there is an equivalency requirement. Id. at 8319 (“[W]here information (such as non-reference emissions data . . .) is equivalent to information generated by reference test methods, the former may be used to establish compliance or noncompliance in an enforcement action.”) (emphasis added).

⁵ “CEM” is the acronym for Continuous Emission Monitoring, which is the general term for automated systems like Georgia Power’s Opacity System.

opacity monitor data, can establish that a violation occurred”) (emphasis added); Grand Canyon Trust v. Pub. Serv. Co. of N.M., 294 F. Supp. 2d 1246, 1247 (D.N.M. 2003) (citing the Rule and observing that it “contemplate[s] reliance on any information that is reliable and specifically include[s] COM data”).⁶

Moreover, courts have held that Opacity System data are equivalent to reference test method results. See, e.g., United States v. LTV Steel Co., Inc., 116 F. Supp. 2d 624, 633 (W.D. Pa. 2000); L.E.A.D. v. Exide Corp., No. CIV. 96-3030, 1999 WL 124473, at *27-*28 (E.D. Pa. Feb. 19, 1999) (“It is clear . . . that CEMS data are probative under the strict liability regime of the CAA.”); Sierra Club v. Pub. Serv. Co. of Colo., 894 F. Supp. 1455, 1456, 1458-59 (D. Colo. 1995). One court correctly found that accepting a defendant’s argument that only Method 9 may be used to prove opacity exceedances “would be contrary to the Act’s purpose and undermine congressional intent.” Sierra Club, 894 F. Supp. at 1460. Indeed, if Georgia Power’s own measurements obtained from its Opacity System data cannot establish an opacity violation and Plaintiffs do not have access to Plant Wansley for unannounced Method 9

⁶ “EPA uses COM data to certify and re-certify the credentials of [visual emissions observers] under Method 9.” 62 Fed. Reg. at 8319. It would be quite illogical - and nonsensical - for EPA to use Opacity System data to confirm, for certification purposes, human observations made under Method 9 if EPA believed Opacity System data were not equivalent to Method 9 test results.

testing, the citizen-suit provision is useless in this case. See Sierra Club, 894 F. Supp. at 1460.

In sum, Georgia Power's Opacity System data are credible, prima facie evidence of the opacity violations alleged in Counts I and II. See Grand Canyon Trust, 294 F. Supp. 2d at 1247-48; Sierra Club, 894 F. Supp. at 1458. The burden thus shifts to Georgia Power to produce evidence creating a genuine issue of fact regarding the particular opacity exceedances. With the exception of the five opacity exceedances discussed below, Georgia Power has not met its burden. Consequently, "no reasonable trier of fact could fail to conclude that [Plaintiffs] ha[ve] proved [Counts] one and two of [their] complaint." Sierra Club, 894 F. Supp. at 1458.

Instead of presenting evidence "that any particular COM measurement was contradicted by a Method 9 observation or by other scientific data," Grand Canyon Trust, 294 F. Supp. 2d at 1248 (emphasis added), Georgia Power has presented expert testimony criticizing its Opacity System, including procedures and processes within Georgia Power's control. The experts opine that Opacity System data are generally unreliable and subject to inaccuracies and that the Count I exceedances, although not reported as

resulting from SSM, actually resulted from SSM. See Exp. Rpt. of Richard D. McRanie, dated Dec. 30, 2003, at 19 n.20; Exp. Rpt. of Ralph L. Roberson, dated Dec. 30, 2003, at 13-15. Rather than attacking its own systems, Georgia Power could have presented evidence of Method 9 readings or “other credible evidence demonstrating any particular COM is inaccurate or that a COM reading should not be considered evidence of a violation” Grand Canyon Trust, 294 F. Supp. 2d at 1249 (emphasis added). See also Sierra Club, 894 F. Supp. at 1460. Without such evidence, Plaintiffs’ prima facie evidence of opacity violations stands unrefuted.⁷ See Sierra Club, 894 F. Supp. at 1461 (granting plaintiff summary judgment on opacity claims based on opacity system data and reports, which the court found possessed “high indicia of reliability and probative value”).

Georgia Power’s experts do opine that most, if not all, of the opacity violations alleged in Count I, for which Georgia Power did not report as resulting from SSM, actually resulted from SSM. The Court has found as a matter of law, however, that there is no SSM defense or exception to these violations. See supra Part IV.B.i-ii. Georgia Power controls the Opacity

⁷ Georgia Power’s evidence of its Opacity System’s unreliability and potential inaccuracy, along with its arguments concerning the infrequency of its excess emissions as a percentage of total annual operating time, may be relevant in the remedy phase as to Plaintiffs’ request for civil penalties.

System and continuously monitors it. (Sewell Aff. ¶ 17-20.) Indeed, Georgia Power controls most of the factors that it now argues make the Opacity System unreliable, and it could have taken Method 9 readings at various times to gather evidence refuting Plaintiffs' prima facie evidence of opacity violations. See Sewell Aff. ¶ 20 (averring that Plant Wansley's senior environmental specialist reviews excess opacity reports to identify reasons for exceedances and may supplement the reports with additional data); Permit Cond. 5.3.8 (affording Georgia Power thirty days after the end of each calendar quarter in which to report the quarter's exceedances to EPD).

Although Plaintiffs have not moved for summary judgment on Count II, there is no genuine issue of material fact regarding the Count II violations for the reasons set out above. Georgia Power reported that the Count II violations resulted from SSM, but the Court has found as a matter of law that Permit Condition 8.13.1 does not excuse these violations. Moreover, neither McRanie nor Roberson presented evidence that any of the individual Count II violations did not occur as reported, and there is no other evidence in the record specifically disputing those violations. See Def.'s Mem. of Law in Supp. of its Mot. for Summ. J. at 16 n.9, 19-27; McRanie Rpt. at 19 n.20. The issues and the record have been fully developed. Georgia Power's reports of Opacity System data establish a prima facie case of a violation in each

situation. Opacity System data are credible evidence, and Georgia Power has presented no evidence creating a genuine issue of fact as to the data's reliability in any specific situation, other than the five events discussed below. Thus, Plaintiffs are entitled to judgment as a matter of law on Count II. See Artistic Entm't, Inc. v. City of Warner Robins, 331 F.3d 1196, 1201-02 (11th Cir. 2003) (affirming district court's sua sponte grant of summary judgment despite lack of formal notice to the parties where the issues and evidentiary record had been fully developed).

Georgia Power has presented unrefuted evidence that five of the Count I exceedances were not exceedances at all, and, thus, Georgia Power is entitled to summary judgment on these five events. Four of these events are numbered 92, 145, 147, and 148, all of which Georgia Power reported as opacity exceedances from coal-fired unit two in its Quarterly Reports. McRanie testified that these four events, three of which he referred to as "apparent excursions," were not exceedances and should not have been reported on the Quarterly Reports as such. (McRanie Rpt. Attach. 1, at 43-44.) Furthermore, William C. Sewell, Plant Wansley's Plant Manager, testified that the February 21, 1999 event was erroneously reported as an exceedance from coal-fired unit one because of administrative error. (Sewell

Aff. ¶ 42.)⁸ Plaintiffs have presented no evidence in response to McRanie's and Sewell's testimony regarding these five events. Thus, there is no genuine issue of fact as to these five events and Georgia Power is entitled to judgment as a matter of law on them.

iv. Plaintiff is Entitled to Summary Judgment on the June 4 and June 6, 2002 Events at Issue in Count III and Georgia Power is Entitled to Summary Judgment on the Remaining Events at Issue in Count III

Permit Condition 3.3.14 prohibits Georgia Power from “operat[ing] the combustion turbines below 85 [megawatts], except during periods of startup or shutdown.” In its quarterly reports to EPD, Georgia Power reported operation of one or more of Wansley's turbines below 85 megawatts on twelve occasions from June through September 2002. For the June 4 and June 6, 2002 events, Georgia Power reported the reason for the events as “Load Change.” (Ukeiley Aff. of Feb. 11, 2004, Ex. 16.) Georgia Power reported that the remaining ten events occurred during startup or shutdown. Plaintiffs move for summary judgment on the June 4 and June 6, 2002 events, and Georgia Power moves for summary judgment on all twelve events.

⁸ Plaintiffs admit that they are no longer pursuing the alleged February 21, 1999 violation. (Pls.' Mem. in Opp'n to Def.'s Mot. for Summ. J. on Counts I, II, and III, at 8 n.1.)

Plaintiffs have failed to create a genuine issue of fact regarding the ten events others than the June 4 and June 6, 2002 events. Contrary to Plaintiffs' argument, Georgia Power has presented evidence - its quarterly reports and Prescott's affidavit - that indicates that these ten events occurred during startup and shutdown. Instead of presenting contrary evidence, Plaintiffs argue that the purported startup events lasted too long. Wansley's Permit does not define "startup" as it relates to the combustion turbines. Plaintiffs urge the Court to adopt a 300-minute maximum for turbine startup periods because another company's combined cycle facility permit defines startup periods as lasting for no longer than 300 minutes and because Plaintiffs know of no other Title V permit providing for longer startup periods.

It is not the function of the courts to redraft permits, and other companies' permits are not evidence of the meaning or interpretation of Wansley's Permit. Plaintiffs present no evidence that EPD, EPA, or anyone intended "startup" as used in Permit Condition 3.3.14 to mean a period of time not exceeding 300 minutes. Thus, Georgia Power's evidence that the events other than the June 4 and June 6, 2002 events occurred during startup is unrefuted. Because Permit Condition 3.3.14 allows Georgia Power to operate Wansley's combustion turbines below 85 megawatts during startup

and shutdown, Georgia Power is entitled to judgment as a matter of law as to these ten events.

Georgia Power contends that the June 4 and June 6, 2002 events occurred during “shakedown,” a one-time period in which new units are tested by their manufacturer and “broken in” before commercial operation. Thus, Georgia Power argues that Plaintiffs’ claims regarding these two events are moot because no shakedown period will recur. Georgia Power can, however, operate its turbines below 85 megawatts in the future for various reasons not allowed under Permit Condition 3.3.14, including load changes and equipment malfunctions.

The Act’s citizen-suit provision allows suits “against any person . . . who is alleged to have violated (if there is evidence that the alleged violation has been repeated)” an emission standard or limitation or any condition of an operating permit. 42 U.S.C. § 7604(a)(1), (3) (emphasis added). See also id. § 7604(f)(4). Plaintiffs allege that Georgia Power violated Permit Condition 3.3.14 on more than one occasion in 2002. Thus, the Act expressly authorizes all of Plaintiffs’ Count III claims, which are not moot because the alleged violations - regardless of their cause - are capable of repetition. Georgia Power’s mootness argument may be relevant, however, to both the issue of civil penalties and Plaintiffs’ request for injunctive relief.

Georgia Power further argues that even if Plaintiffs' claims regarding the June 4 and June 6, 2002 events are not moot, the two events resulted from malfunctions of the turbines and, thus, are allowed by Permit Condition 8.13.1. Georgia Power's present assertion that the previously reported "load changes" used to "break in" the equipment were really malfunctions is disingenuous. See also Pls.' Reply in Supp. of Mot. for Part. Summ. J. Sealed Ex. A, at 9 (distinguishing between exceedances caused by malfunctions and those caused by load change). In any event, the Court has found that Permit Condition 8.13.1 is not an affirmative defense available to Georgia Power in a citizen-suit. See supra Part IV.B.ii. Thus, despite the conflicting evidence regarding whether the June 4 and June 6, 2002 events resulted from malfunctions, Plaintiffs are entitled to summary judgment on these two events because, as a matter of law, there is no malfunction defense or exemption in this citizen-suit from Permit Condition 3.3.14's prohibition.

V. Plaintiff's Motion in Limine

Plaintiffs contend that Richard McRanie's expert report submitted in support of Georgia Power's motion for summary judgment does not indicate that McRanie used reliable principles or methods to arrive at his "root cause" conclusions. Plaintiffs question the methodology McRanie used to formulate his opinions because he did not specifically describe the methodology in his

report. McRanie relied heavily on his extensive personal experience in the electric power industry, but Plaintiffs argue he should have provided a more explicit link between the experiences and knowledge upon which he relies and the conclusions he ultimately reached regarding the specific opacity exceedances at issue in this case.

Although Plaintiffs' desire to have a step-by-step roadmap of McRanie's methodology and analytical processes is understandable, the lack of such a roadmap is not fatal to McRanie's proffered expert testimony. McRanie's root cause analysis is fact-intensive and focused on the opacity exceedances at issue in Count I. Thus, generally applicable principles or methodologies - assuming they exist in this context - may not be of much use. Indeed, Plaintiffs offer no evidence of particular principles or methods McRanie should have used for the root cause analyses he performed, thus refuting their argument that his heavy reliance on experience is insufficient. McRanie examined raw opacity data, environmental reports, Georgia Power's operating data for the dates of the exceedances, and Georgia Power's operational and maintenance procedures. McRanie also physically inspected Plant Wansley and interviewed its personnel. McRanie's failure to expressly link each of these data sources to his ultimate conclusions via a detailed audit trail does

not render his opinions inadmissible, but instead goes to the weight and credibility of his testimony.

Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 113 S. Ct. 2786

(1993) and its progeny do not establish a rigid, bright-line test for determining whether expert testimony is sufficiently reliable for admission. Instead, the Court must, in exercising its discretion, consider many factors to determine whether expert testimony is sufficiently reliable. Reviewing the various factors as they apply to this case, the Court finds McRanie's expert testimony sufficiently reliable and admissible.

VI. Conclusion

For the foregoing reasons, Georgia Power's motion for summary judgment on Counts I-III of Plaintiffs' Complaint [#45] is **GRANTED in part** and **DENIED in part**. Specifically, Georgia Power's motion is **GRANTED** as to the February 21, 1999; May 6, 2001; August 29, 2002; September 11, 2002; and September 23, 2002 events at issue in Count I and all events alleged in Count III other than the June 4 and June 6, 2002 events. Georgia Power's motion is **DENIED** as to the June 4 and June 6, 2002 events alleged in Count III and as to all the events at issue in Counts I and II other than the five described above.

Plaintiffs' motion for summary judgment on Count I and the June 4 and June 6, 2002 events at issue in Count III [#46] is **GRANTED in part** and **DENIED in part**. Specifically, Plaintiffs' motion is **DENIED** as to the February 21, 1999; May 6, 2001; August 29, 2002; September 11, 2002; and September 23, 2002 events at issue in Count I. Plaintiffs' motion is **GRANTED** as to the June 4 and June 6, 2002 events alleged in Count III and as to all the events at issue in Counts I and II other than the five described above. Plaintiffs' motion in limine to exclude Richard McRanie's expert testimony [#69] is **DENIED**.

As a result of the Court's rulings, only the remedy phase of this action remains. The legal and factual issues regarding remedies will be determined at the February 2, 2005 pretrial conference. The parties shall submit a proposed pretrial order by January 24, 2005. The case remains on the Court's trial calendar beginning March 14, 2005 to resolve all remaining factual issues.

SO ORDERED, this 14th day of December, 2004.

/s/ Jack Camp
JACK T. CAMP
UNITED STATES DISTRICT JUDGE